

Performance Framework Measures

Understanding Proficiency Targets, Percentile Ranks, and Growth Quintiles

Montana Community Choice Schools Commission

Prepared by Solomon Research & Analytics

The Performance Framework evaluates community choice schools on two core academic dimensions: **proficiency** (how students perform relative to peers) and **growth** (how much academic progress students make over time). This document explains how each measure works.

1 How Proficiency Targets Are Set

Proficiency targets are anchored to **national norms** established by assessment publishers. These norms are derived from nationally representative student samples and define how the **typical student** performs at each grade level.

The **50th national percentile** represents the performance of the typical student — the point at which a student performs as well as or better than half of all students nationwide. This is the **proficiency benchmark**.

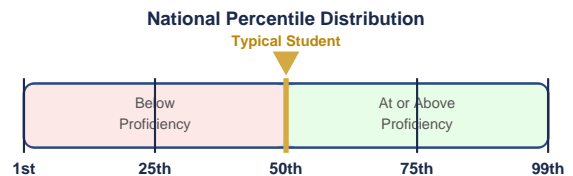
A school's **proficiency rate** is then defined as the **proportion of its students who score at or above the 50th percentile**. This provides a clear, consistent measure of how many students are performing at or above the level of the typical student nationwide.

Using national norms ensures that targets are:

Objective — grounded in empirical data rather than local expectations that may shift over time.

Comparable — allowing performance to be understood in a broader context beyond any single state or district.

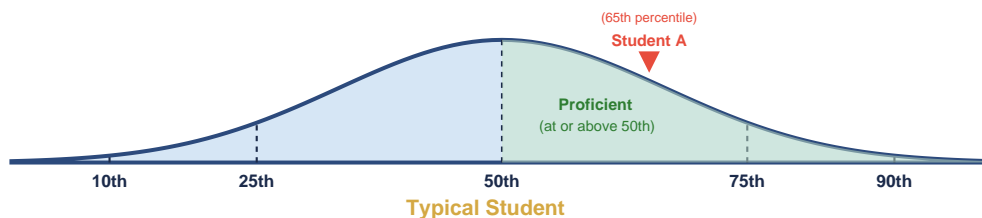
Rigorous — setting a consistent standard that reflects grade-level expectations as defined by nationally normed assessments.



2 How Percentile Ranks Work

Each student receives a percentile rank based on how they performed relative to a nationally normed sample. A student at the **65th percentile** scored higher than 65% of students nationwide. The **50th percentile**, representing how the typical student perform, serves as the **proficiency benchmark**.

The Performance Framework then measures the **proportion of a school's students who reach or exceed the 50th percentile**. A higher proportion indicates that more students are performing at or above the level of the typical student as defined by national norms.



Each student's percentile rank shows how they performed relatively to a national sample. The 50th percentile represents the typical student.

Performance Framework Measures

Understanding Proficiency Targets, Percentile Ranks, and Growth Quintiles

Montana Community Choice Schools Commission

Prepared by Solomon Research & Analytics

3 How Growth Is Measured

Growth is measured using **Growth Percentiles (GPs)**, which compare each student's year-over-year academic progress to that of academic peers. Peers are other students who began at a similar achievement level (Betebenner, 2009). Because growth is conditional on where a student started, a student does not need to be at grade level to demonstrate strong growth. Even students with very low test scores can show high levels of learning over time.

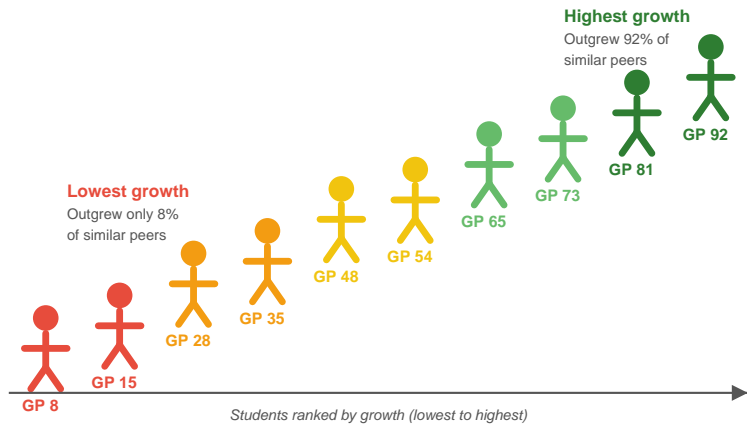
Example: 10 Students in the Lower Achievement Quartile

Consider 10 students who all started in the bottom quartile of achievement. They took the same assessment and had comparable prior scores.

Although these students began at the same level, their growth varied widely. Each student is compared only to peers with similar starting points — not to all students statewide.

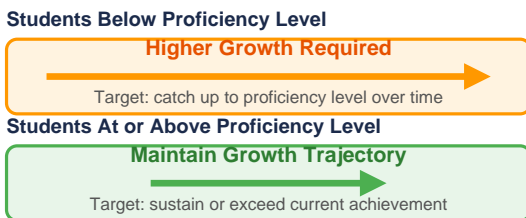
The student with an GP of 92 demonstrated more growth than 92% of similar peers. The student with an GP of 8 showed less growth than 92% of similar peers.

A school's **median GP** summarizes how its students grew overall — the middle value when all student GPs are ranked in order.

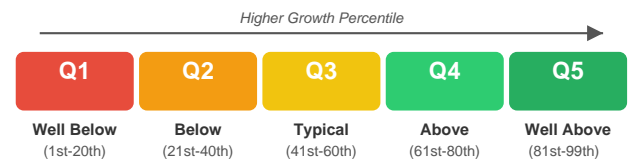


The Two-Tiered Growth Standard

The framework applies a **two-tiered growth standard** that sets different expectations depending on where a student currently stands in achievement:



Schools are then assigned to one of **five quintiles** based on their **median student growth percentile**:



References:

Betebenner, D. W. (2009). Norm- and criterion-referenced student growth. *Educational Measurement: Issues and Practice*, 28(4), 42-51.
Store, D., Sullivan, W., Marr, J. A., & Cronstrom, E. G. (2021). Necessary conditional growth percentiles. The Center for Charters, Central Michigan University.